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The RELATIONSHIP BETWEEN PARITY AND ANXIETY LEVELS IN THIRD TRISMESTER PREGNANT WOMEN

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ABSTRACT

Background: Gadgets are a technological development whose use is widespread across all ages, including children under 5 years old. During this period, children experience a relatively rapid increase in development across all aspects, such as motor, language-speech, and socialisation-independence. Excessive gadget use at this age can interfere with the child's developmental process. For instance, a gadget screen always displays images of the same size, even though real-life objects vary in size, which can inhibit the child's fine motor development. Moreover, static activity while playing with gadgets can disrupt the child's gross motor development. **Object:** The objective of this study was to analyze the influence of gadget use on the emotional development of early childhood. **Method** This study used an analytic observational design with a cross-sectional approach. The study population was children at TK KB Al-Uswah Magetan, conducted from July– October 2023, with a sample size of 134 children, obtained from questionnaires completed by the parents. **Results:** The results showed that the intensity and attitude of gadget use and the emotional development of early childhood were mostly in the moderate and normal categories, respectively. The Spearman's rho test yielded a value of ρ = 0.000 ($\rho < 0.05$) with an OR = -0.216, indicating a low, negative relationship between gadget use and the emotional development of early childhood (difficulty scale)· **Conclusion:** In contrast, there was no relationship found with the emotional development (strength scale) (ρ = 0.820; $\rho > 0.05$). In conclusion, there is a low but significant relationship between gadget use and the emotional difficulty scale, but not the emotional strength scale, in early childhood.

Keywords: Gadgets, Emotional, Early Childhood

BACKGROUND

The rapid development of digital technology has increased gadget use among young children. Gadgets provide benefits as tools for communication, information access, and entertainment; however, excessive use may affect children's social and emotional development (Kamila & Putri, 2025). This issue is of particular concern because early childhood is considered the golden age, a critical period for physical, cognitive, social, and emotional development (Widyawati et al, 2023).

The use of gadgets among children continues to rise, with some preschool-aged children spending nearly three hours per day on gadgets, exceeding the recommended screen time duration (Rawanita & Mardhiah, 2024). Uncontrolled gadget use may reduce children's social interactions with their surrounding environment and increase the risk of emotional problems, such as tantrums, aggressive behavior, and difficulties in emotional regulation (Falensia et al, 2025). These conditions are also influenced by the quality of parental supervision regarding both the duration of use and the content accessed by children

(Ginting et al., 2023).

Social-emotional development refers to a child's ability to recognize, manage, and appropriately express emotions (Puspitasari., 2022). Children who spend excessive time using gadgets tend to have fewer opportunities to develop social skills through direct interactions with family members and peers (Zuhra et al., 2022). Nevertheless, the negative effects of gadget use can be minimized through appropriate parenting practices and consistent guidance from parents and teachers (Masykurin & Rohmah, 2023).Data indicate that the use of digital devices among young children in Indonesia continues to increase (Santika, 2023). At the same time, social-emotional developmental problems remain a concern because they can affect children's overall growth and development (Rahmadyanti & Jamilah, 2023).

During early childhood (1–5 years old) or the golden age, intellectual, emotional, and spiritual development occurs very rapidly. Excessive gadget play during this time can negatively affect language and emotional development, leading to easy anger, impatience, and difficulty controlling oneself. Emotional development is heavily influenced by interaction with family and social environments. A study at TK KB Al-Uswah indicated that excessive gadget use made children easily angry and aggressive towards others. The issue or problem that is the focus of the research why it is a very important, and how the topic is relevant in the broader context of the field of study : This research highlights the influence of gadget use on the emotional development of early childhood to understand the positive and negative impacts of early technology use and the importance of parental involvement.

RESEARCH METHODS

Research Design This study employed an analytical observational design with a cross-sectional approach. The purpose was to analyze the relationship between gadget use and emotional development in early childhood.

RESULTS AND DISCUSSION

A. Noise intensity measurement results

The Results section presents the main findings of the study without further interpretation or discussion, clearly and systematically organized, following all presentation requirements. The results are grouped into three main categories: (A) Gadget Use Characteristics, (B) Emotional Development Categories, and (C) Statistical Relationship.

Table 1.

Noise Measurement Results of Use Gadget Children in TK KB Al-Uswah Magetan

Use of Gadgets	Frequency (f)	Presentation (%)
Good	60	44,8
Medium	63	47,0
Bad	11	8,2
Total	134	100%

Based on Table 1 shows that out of a total of 134 respondents, the majority of early childhood children had gadget usage in the moderate category, accounting for 63 children (47.0%). This was followed by the good category with 60 children (44.8%), and the poor category with 11 children (8.2%). Based on the respondents' characteristics, most children belonged to certain dominant categories and age ranges within the study sample. This distribution indicates that the majority of respondents came from families with more than one childbirth experience, which may indirectly influence parenting styles and parental experience in supporting child development. In terms of age, the variation in age groups reflects that respondents were in a crucial early developmental stage, where environmental stimulation, including exposure to digital technology, plays an important role in emotional

development. Theoretically, demographic characteristics such as age and parental experience may contribute to how children interact with gadgets and how their emotional responses are formed. Overall, this finding suggests that most children use gadgets in TK KB Al-Uswah Magetan.

B. Emotional Development

Table 2.

Emotional Development Chindren in TK KB Al-Uswah Magetan

Emotional development	Abnormal	f (%)	Borderlines	f (%)	Normal	f (%)	Total	f (%)
Difficulty scale	2	1,5	9	6,7	123	91,8	134	100
Power scale	1	0,7	10	7,5	123	91,8	134	100

The table 2 above shows on the difficulty scale, most children were categorized as normal, with 123 children (91.8%), while 9 children (6.7%) were in the borderline category, and 2 children (1.5%) were classified as abnormal. Similarly, on the strength scale, the majority were also in the normal category, with 123 children (91.8%), followed by 10 children (7.5%) in the borderline category and 1 child (0.7%) in the abnormal category. Referring to gadget usage, most children were in the moderate usage category, with a considerable proportion using gadgets for more than 60 minutes per day. This finding indicates that the duration of gadget use among young children tends to exceed the recommended limits suggested by child development experts. Conceptually, prolonged gadget use may reduce children's direct interaction with their social environment. However, not all gadget use has negative effects, as digital devices can also serve as educational tools under certain conditions. Therefore, the impact largely depends on usage intensity, content type, and parental involvement. Overall, these findings indicate that children's emotional development is generally within the normal range.

C. Characteristics of Respondents Based on Emotional Development in Early Childhood

Table 3.

Characteristics of Respondents Based on Emotional Development in Early Childhood

Characteristics	Characteristics of Respondents Based on Emotional Development in Early Childhood (N=134)
Emotional Development Scale	Abnormal (f %)*
Difficulty Scale	2 (1.5)
Strength Scale	1 (0.7)

Description	The majority of emotional development outcomes for both the Difficulty Scale and the Strength Scale were in the normal category (91.8% for both).

This table reinforces that the majority of respondents fall into the normal category for both the difficulty and strength scales, each accounting for 91.8%. This indicates that most children demonstrate good emotional development.Although most children are categorized as normal, a small proportion falls into the abnormal category, suggesting the presence of potential emotional difficulties that require further attention. This condition may be influenced by several factors, such as limited social interaction, suboptimal parenting practices, and the possible use of gadgets as a distraction tool by parents in TK-KB Al-Uswah Magetan.

D. Relationship between Gadget Use and Emotional Development (Difficulty Scale) in Early Childhood

Table 4.

Relationship between Gadget Use and Emotional Development (Difficulty Scale) in Early Childhood

Characteristics	**Relationship between Gadget Use and Emotional Development (Difficulty Scale) in Early Childhood**
Spearman's ρ Statistical Test Value (ρ): 0.012	Significance Level: $\rho < 0.05$
Correlation Coefficient (R): - 0.216	Correlation Strength: Very Weak (Negative)
Description	The Spearman Rho test resulted in a p-value of 0.012, which is less than 0.05, indicating a significant relationship between gadget use and emotional development (difficulty scale). The correlation coefficient R = -0.216 suggests a very weak, inverse relationship.

The results of the Spearman's rho test showed a value of $p = 0.012$ ($p < 0.05$), indicating a statistically significant relationship between gadget use and emotional development on the difficulty scale. The correlation coefficient ($r = -0.216$) indicates a very weak negative relationship, suggesting that higher gadget use tends to be associated with a slight decrease in emotional development, although the effect is minimal. On the emotional strength scale, most children were still categorized as normal.

This indicates that children's prosocial abilities, such as sharing, helping, and showing empathy, remain well developed. Theoretically, emotional strength is more influenced by direct social interactions, including relationships with parents, peers, and the surrounding environment. Therefore, despite exposure to gadgets, prosocial abilities can still develop adequately as long as children receive sufficient social stimulation.

Table 5.

Relationship between Gadget Use and Emotional Development (Strength Scale) in Early Childhood

Characteristics	Relationship between Gadget Use and Emotional Development (Strength Scale) in Early Childhood
Spearman's ρ Statistical Test Value (ρ): 0.820	Significance Level: ρ > 0.05
Correlation Coefficient (R): - 0.020	Correlation Strength: Very Weak (Negative)
Description	The Spearman Rho test resulted in a p-value of 0.820, which is greater than 0.05, indicating no significant relationship between gadget use and emotional development (strength scale). The correlation coefficient R = - 0.020 suggests a very weak, inverse relationship.

The test results showed a value of p = 0.820 (p > 0.05), indicating no significant relationship between gadget use and emotional development on the strength scale. The correlation coefficient (r = -0.020) reflects a very weak negative relationship, which is statistically insignificant. Based on the bivariate analysis using Spearman's rho, the findings indicate that there is a relationship between gadget use and emotional difficulties, however, the strength relationship very weak and negative. This suggests that while gadget use is associated with emotional difficulties, its influence is not dominant. The negative direction indicates a non-linear or inconsistent relationship, which may be influenced by other variables outside the scope of the study. Therefore, gadget use cannot be considered a primary determinant of emotional development but rather one of several contributing factors in TK-KB Al-Uswah Magetan about Chindren use gadgets for than everyday.

Discussion

The results of the study showed a significant relationship between gadget use and the emotional development of early childhood children on the difficulties scale (p = 0.012). This finding indicates that uncontrolled gadget use may increase the risk of emotional problems in children. Gadgets indeed provide benefits as tools for communication, information access, and entertainment (Yusuf & Kamariah, 2025). However, excessive use can hinder children's social and emotional development (Kamila & Putri, 2025). This condition may occur because children spend more time interacting with screens than engaging with their social environment (Apriani et al., 2022).

The findings are consistent with the theory that early childhood represents the golden age, a critical period for physical, cognitive, social, and emotional development (Ardiansyah, 2026). During this stage, children require direct interaction with parents, teachers, and peers to learn how to recognize and manage their emotions. Emotional regulation refers to an individual's ability to recognize, understand, control, and appropriately express emotions in social life (Puspitasari et al., 2022). When gadget use becomes overly dominant, children's opportunities to

develop these abilities may be reduced (Zuhra et al., 2022).

These findings are further supported by previous studies showing that children aged 3–6 years may spend nearly three hours per day in front of screens, exceeding the recommended limit (Rawanita & Mardhiah, 2024). Children who use gadgets for more than one hour per day tend to experience greater social-emotional developmental problems than those who use gadgets for less than one hour daily (Nuraini & Wardhani, 2023). Excessive gadget use has also been associated with an increased risk of anxiety, tantrums, aggressive behavior, and poor self-control (Twenge & Campbell, 2023). In addition, children may imitate behaviors displayed in digital media, including content that is inappropriate for their age, when gadget use is not adequately supervised (Herliani et al., 2022).

Nevertheless, this study found no significant relationship between gadget use and emotional development on the strengths scale (p = 0.820). This suggests that prosocial abilities, such as helping, sharing, and cooperating, may be influenced more strongly by factors other than gadget use. Democratic parenting characterized by emotional closeness has been shown to positively support children's social-emotional development (Masykurin & Rohmah., 2023). Consistent digital guidance from parents and teachers can also help children use technology in a healthy manner without negatively affecting their emotional development (De lima et al, 2022). Therefore, parental supervision of both the duration and content of gadget use is essential (Widiastuti & Yulianti, 2025).

Improving family digital literacy is also necessary to ensure that children can utilize technology in a healthy, controlled, and responsible way (Winarji et al., 2026). Thus, gadget use among young children should be balanced with play activities, communication, and direct social interaction to support optimal emotional development (Sisbintari & Setiawati, 2022).

CONCLUSION

The study found that the majority of children's emotional development (difficulty scale) was in the normal category. However, the statistical test for the difficulty scale showed a significant relationship with gadget use, albeit a very weak one (ρ =0.012, R=-0.216. A negative correlation suggests that as gadget use tends toward a more negative category, the emotional difficulty tends toward a less negative category. The negative value of R=-0.216 suggests a non-unidirectional relationship. The finding that most children use gadgets for >60 minutes per day (50%) is contrary to the recommendation of leq 1hour per day. The assumption is that parents who are busy might give their children a gadget to keep them quiet and non-disruptive, allowing the gadget to become a "second caregiver". Excessive gadget use is known to negatively affect a child's character, potentially leading to self-centeredness, rebelliousness, reluctance to share, aggression (physical or verbal), and becoming easily emotional when the gadget is taken away.

Prolonged gadget use can disrupt a child's social interaction with their environment and family, leading to an inactive lifestyle. The fact that no relationship was found between gadget use and the emotional development strength scale (ρ =0.820$) suggests that gadget use did not significantly affect the prosocial aspects (such as helping and sharing) measured by this scale.

Explain what the research results mean and how they support or contradict the initial hypothesis. The Conclusion section summarizes the main findings and provides clear conclusions and the relevance of the research. Gadget use in early childhood

at TK Al-Uswah Magetan is mostly in the moderate category. Emotional development (difficulty and strength scales) in early childhood at TK Al-Uswah Magetan is mostly in the normal category. There is a low, significant relationship between gadget use and the emotional development difficulty scale (ρ =0.012, ρ <0.05) in early childhood at TK Al-Uswah Magetan. There is no significant relationship between gadget use and the emotional development strength scale (ρ =0.820; ρ >0.05) in early childhood at TK Al-Uswah Magetan.

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